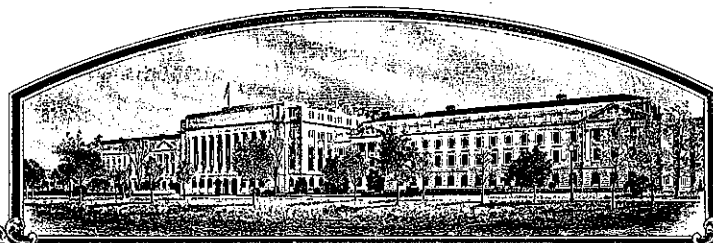


No.



9600218

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Agripro Seeds, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED, PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE SEED. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT

'Mason'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this twenty-eighth day of June in the year of our Lord one thousand nine hundred and ninety-six.

Attest:

Marsha A. Stanton
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Earl F. Smith
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE DIVISION - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a).

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

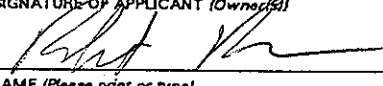
1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) Agripro Seeds, Inc. <u>HybriTech US, a Monsanto Company</u> <u>CGM 01 Jun 1998</u>		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER <u>91D-2308</u>	3. VARIETY NAME <u>MASON</u>
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) <u>6700 Antioch</u> <u>P.O. Box 2962</u> <u>Shawnee Mission, Kansas 66201-1362</u>		5. TELEPHONE (include area code) <u>913-384-4940</u>	FOR OFFICIAL USE ONLY PVPO NUMBER <u>9600218</u>
		6. FAX (include area code) <u>913-384-0208</u>	
7. GENUS AND SPECIES NAME <u>Triticum aestivum</u>	8. FAMILY NAME (Botanical) <u>Gramineae</u>		F I L E N O <u>4-12-96</u>
9. CROP KIND NAME (Common name) <u>Soft Red Winter Wheat</u>		F E E S <u>2450.00</u>	
10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) (Common name) <u>Corporation</u>		DATE <u>03/27/96</u>	
11. IF INCORPORATED, GIVE STATE OF INCORPORATION <u>Delaware</u>	12. DATE OF INCORPORATION <u>June 1994</u>		CERTIFICATION FEE <u>300.00</u>
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS <u>Robert Bruns</u> <u>806 N. Second Street</u> <u>P.O. Box 30</u> <u>Berthoud, Colorado 80513</u> <u>OR</u> <u>Christine Bruns</u> <u>Berthoud, CO</u> <u>Mark J. Messmer</u> <u>HybriTech US</u> <u>5912 North Meridian</u> <u>Wichita KS 67204</u> <u>CGM 01 Jun 1998</u>		14. TELEPHONE (include area code) <u>970-532-3721</u> <u>316 755 7707</u> 15. FAX (include area code) <u>970-532-2035</u> <u>316 755 0072</u> email: <u>Mark.J.Messmer@Monsanto.Com</u>	
16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)			
a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of the Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Applicant's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in a public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to PVPO)			
17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? (See Section 83(e) of the Plant Variety Protection Act) <input checked="" type="checkbox"/> YES If "yes," answer items 18 and 19 below <input type="checkbox"/> NO If "no," go to item 20			
18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input checked="" type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input checked="" type="checkbox"/> CERTIFIED	
20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES? <input type="checkbox"/> YES If "yes," give names of countries and dates <input checked="" type="checkbox"/> NO			
21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.			
The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.			
Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF APPLICANT (Owner(s)) 		SIGNATURE OF APPLICANT (Owner(s))	
NAME (Please print or type) <u>Robert Bruns</u>		NAME (Please print or type)	
CAPACITY OR TITLE <u>General Manager-Wheat Research</u>	DATE <u>4-8-96</u>	CAPACITY OR TITLE	DATE

EXHIBIT A.

ORIGIN AND BREEDING HISTORY OF MASON

Parentage: Cardinal/C78318//Coker 9323

Date of Cross: March 1985

The three-way cross, (Cardinal/C78318)F1/Coker 9323 was made in the 1985 spring greenhouse at Brookston, IN. The C78318 parent of the hybrid involved in this cross was a large headed selection from the single cross, MN74143/Oligoculm. MN74143 is a cross derived from Predgornia/3/II-62-68/Tobari//Fletcher/Ciano/4/Era/Tobari//CII3992 from Agripro's Hard Red Spring Wheat breeding program in Berthoud, CO. The F1 row was grown in a field near Marion, AR in 1986. Seeds harvested from this row were grown in 1986-87 F2 bulk plots near Marion, AR and Brookston, IN. A portion of the Brookston harvested F2 bulk plot was space-planted in a 1987-88 F3 bulk plot at Brookston, IN. Ninety-eight F4 heads were selected from this bulk plot and advanced by single seed descent to the F6 generation in the Brookston 1988-1989 greenhouse. Sixty-nine F6 selections were grown as Pre-Y1 (head-rows) in a field near Crawfordsville, AR in 1990. The selection that became Mason was selected for disease resistance and excellent agronomics and grown in a Y1 trial near Jonesboro, AR in 1991. Mason has been in advanced testing from 1992 to the present and was in the 1993-94 Uniform Southern Soft Wheat Nursery under the experimental number, ABI 91-2308.

In 1993, 100 headrows were grown in Jonesboro, Arkansas. Ninety-six of these rows were bulked and grown in a 0.5 acre breeder seed increase in Berthoud, Colorado in 1994. This breeder seed increase produced 1,920 pounds of foundation seed. In 1995, 159,840 pounds of registered seed was produced in Fort Morgan, Colorado.

Mason has been uniform and stable since 1994. Less than 0.8% of the plants were rogued from the breeder seed field in 1994. Approximately 75% of the rogued variant plants were taller height (10-15 centimeters) awnletted wheat plants, 12% were awned wheat plants and 3% were bronze chaffed wheat plants. Up to 1% variant plants may be encountered in subsequent generations.

EXHIBIT B.

9600218

STATEMENT OF DISTINCTNESS

Mason is most similar to the soft red winter wheat Hickory. However, it can be easily distinguished by the following morphological characteristics:

- Mason has a recurved flag leaf (Berthoud, Colorado 1994 and 1995). Hickory has an erect flag leaf (Berthoud, Colorado 1994 and 1995).
- Mason has a square shoulder shape on the glume (Berthoud, Colorado 1994 and 1995). Hickory has an oblique shoulder shape (Berthoud, Colorado 1994 and 1995).

OBJECTIVE DESCRIPTION OF VARIETY
WHEAT (*Triticum* Spp.)

9600218

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S) Agripro Seeds, Inc	FOR OFFICIAL USE ONLY
ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) 6700 Antioch P.O. Box 2962 Shawnee Mission, Kansas 66201-1362	PVPO NUMBER
	VARIETY NAME OR TEMPORARY DESIGNATION MASON

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in the first box (e.g. or) when number is either 99 or less or 9 or less.

1. KIND:

1 = COMMON 2 = DURUM 3 = CLUB 4 = OTHER (SPECIFY) _____

2. VERNALIZATION:

1 = SPRING 2 = WINTER 3 = OTHER (SPECIFY) _____

3. COLEOPTILE ANTHOCYANIN:

1 = ABSENT 2 = PRESENT

4. JUVENILE PLANT GROWTH:

1 = PROSTRATE 2 = SEMI-ERECT 3 = ERECT

5. PLANT COLOR (boot stage):

1 = YELLOW-GREEN 2 = GREEN 3 = BLUE-GREEN

6. FLAG LEAF (boot stage):

1 = ERECT 2 = RECURVED

1 = NOT TWISTED 2 = TWISTED

7. EAR EMERGENCE:

NUMBER OF DAYS EARLIER THAN Hickory *

NUMBER OF DAYS LATER THAN *

8. ANTER COLOR:

1 = YELLOW 2 = PURPLE

9. PLANT HEIGHT (from soil to top of head, excluding awns)

cm. TALLER THAN 90.6 cm *

cm. SHORTER THAN Hickory *

* Relative to a PVP-approved commercial variety grown in the same trial.

10. STEM:

A. ANTHOCYANIN

☐ 1

1 = ABSENT 2 = PRESENT

B. WAXY BLOOM

☐ 2

1 = ABSENT 2 = PRESENT

C. HAIRINESS (last internode of rachis)

☐ 2

1 = ABSENT 2 = PRESENT

D. INTERNODE (specify number) _____

☐ 1

1 = HOLLOW 2 = SEMI-SOLID 3 = SOLID

E. PEDUNCLE

☐ 2

1 = ERECT 2 = RECURVED

☐ 3 ☐ 5

cm. PEDUNCLE LENGTH

9600218

11. HEAD (at Maturity):

A. DENSITY

☐ 2

1 = LAX 2 = MIDDENSE 3 = DENSE

B. SHAPE

☐ 1

1 = TAPERING 2 = STRAP 3 = CLAVATE 4 = OTHER (specify) _____

C. CURVATURE

☐ 3

1 = ERECT 2 = INCLINED 3 = RECURVED

D. AWNEDNESS

☐ 3

1 = AWNLESS 2 = APICALLY AWNLETTERED 3 = AWNLETTERED 4 = AWNED

12. GLUMES (at Maturity):

A. COLOR

☐ 1

1 = WHITE 2 = TAN 3 = OTHER (specify) _____

B. SHOULDER

☐ 4

1 = WANTING 2 = OBLIQUE 3 = ROUNDED 4 = SQUARE 5 = ELEVATED 6 = APICULATE

C. BEAK

☐ 1

1 = OBTUSE 2 = ACUTE 3 = ACUMINATE

D. LENGTH

☐ 3

1 = SHORT (ca. 7mm) 2 = MEDIUM (ca. 8mm) 3 = LONG (ca. 9mm)

E. WIDTH

☐ 1

1 = NARROW (ca. 3mm) 2 = MEDIUM (ca. 3.5mm) 3 = WIDE (ca. 4mm)

5

13. SEED:

A. SHAPE

☐ 1

1 = OVATE 2 = OVAL 3 = ELLIPTICAL

B. CHEEK

☐ 1

1 = ROUNDED 2 = ANGULAR

9600218

C. BRUSH

☐ 2

1 = SHORT 2 = MEDIUM 3 = LONG

☐ 1

1 = NOT COLLARED 2 = COLLARED

D. CREASE

☐ 11 = WIDTH 60% OR LESS OF KERNEL
2 = WIDTH 80% OR LESS OF KERNEL
3 = WIDTH NEARLY AS WIDE AS KERNEL☐ 11 = DEPTH 20% OR LESS OF KERNEL
2 = DEPTH 35% OR LESS OF KERNEL
3 = DEPTH 50% OR LESS OF KERNEL

E. COLOR

☐ 3

1 = WHITE 2 = AMBER 3 = RED 4 = OTHER (specify) _____

F. TEXTURE

☐ 2

1 = HARD 2 = SOFT

G. PHENOL REACTION (see instructions)

☐ ---1 = IVORY 2 = FAWN 3 = LIGHT BROWN
4 = DARK BROWN 5 = BLACK

14. DISEASE: (0 = NOT TESTED; 1 = SUSCEPTIBLE; 2 = RESISTANT) 3=moderate resistance

☐ 2STEM RUST
(Res. genes) _____☐ 0STRIPE RUST
(Res. genes) _____☐ 1MILDEW
(Res. genes) _____☐ 3*Septoria nodorum*
(Res. genes) _____☐ 0BYDV
(Res. genes) _____☐ 3SBMV
(Res. genes) _____☐

OTHER _____

☐ 2LEAF RUST
(Res. genes) _____☐ 0LOOSE SMUT
(Res. genes) _____☐ 0BUNT
(Res. genes) _____☐ 3*Septoria tritici*
(Res. genes) _____☐ 0WSMV
(Res. genes) _____☐ 3SSMV
(Res. genes) _____

6

15. INSECT: (0 = NOT TESTED; 1 = SUSCEPTIBLE; 2 = RESISTANT)

☒ 1

HESSIAN FLY (Res. genes) _____

☐ 0

STEM SAWFLY (Res. genes) _____

☐ 0

CEREAL LEAF BEETLE (Res. genes) _____

☐ 0

APHIDS (Res. genes) _____

☐ 0

GREENBUG (Res. genes) _____

☐ 0

RUSSIAN APHID (Res. genes) _____

☐

OTHER (specify) _____

9600218

EXHIBIT D.***ADDITIONAL DESCRIPTION OF MASON***

Mason is a soft red winter wheat bred and developed by Agripro Seeds, Inc. It was derived from the cross Cardinal/C78318//Coker 9323. Mason is a high yielding, strong strawed, medium height wheat with early maturity. Mason offers resistance to the most prevalent races of leaf rust and stem rust in its area of adaptation. It offers moderate resistance to Septoria leaf and glume blotches and moderate resistance to spindle streak and soil borne mosaic viruses.

Juvenile growth habit is semi-erect. Plant color at boot stage is green. The flag leaf is recurved and twisted. Auricle anthocyanin and auricle hairs are present. Waxy bloom is present on the stem, flag leaf sheath and head. The head is tapering, awnletted and middense. Spike position at maturity is recurved. Glumes are long and narrow with square shoulders and obtuse beaks. Seed shape is ovate. The seed brush is medium in length and large in size. Seed cheeks are rounded.

Mason is well adapted to the states of Louisiana and Arkansas, to the Delta and southern areas of the states of Mississippi, Alabama and Georgia, to northern Florida and to the coastal plain area of South Carolina.

8

EXHIBIT E.***STATEMENT OF THE BASIS OF APPLICANT'S
OWNERSHIP***

The variety for which Plant Variety Protection is hereby sought was developed by Dr. Koy Miskin and Barton Fogleman employees of Agripro Seeds, Inc. By agreement between employees and Agripro Seeds, Inc., all rights to any invention, discovery, or development made by the employee while employed by Agripro Seeds, Inc., were assigned to Agripro Seeds, Inc., with no rights of any kind pertaining to 'Mason' being retained by the employees.

EXHIBIT F.

QUALITY AND AGRONOMIC DATA

Agronomic Datapages 1.& 2.

Quality Datapage 3.

Supportive Information for Mason Wheat

Agronomic and Pathologic Data

	HEADING	ANTHESIS	'95 MATURITY	(in.) HT	TW	'95 % LR	SR	% PM	— Nod.	Septoria Trit.	— Cmplx	BYD	Soil Virus Complex
MASON	98.9	108.5	139.0	35.7	56.9	1	2	38	3	4	3	2	4
HICKORY	101.2	111.0	140.6	37.5	56.9		3		3	5			4
COKER 9835	102.5	111.0	141.5	32.3	55.6	23	9	21	2	6	3	4	5
(Pioneer) 2684	99.3	109.5	140.8	34.8	58.8	17			2	7	3		3
FLORIDA 302								30	4	5	4	4	8
# Locations	23	2	8	20	25	6	1	5	3	1	5	2	3

1993-94 USDA-ARS Hessian Fly Screening

	BIOTYPES						HESSIAN FLY	'95 GA % Inf. Stems
	B	C	D	E	GP	L		
MASON	S	S	S	S	S	S	MASON	16.0
COKER 9835	S	Rseg	S	Seg	R	S	COKER 9835	1.3
FLORIDA 302	S	S	S	S	S	S	HICKORY	4.0
SALUDA	S	Rseg	S	Seg	Rseg	S	PIONEER 2643	14.7
							COKER 9904	25.3
							JACKSON	34.7

Note: Rankings in this table represent the average for a given trait on a 1-9 scale where 1 and 9 represent the extremes for the respective traits.

Trait	1	9
Heading	early	late
Maturity	early	late
Coleoptile	long	short
Height	short	tall
Straw Strength	strong	weak
All disease & Insect ratings	resistant	susceptible

9600218

1993-1995 PRIMARY ADAPTATION AREA YIELD TRIALS

University, Extension & AgriPro Trials containing MASON

(sites from SC, GA, MS, LA, AR, MO, TN, KY)

VARIETY	3 YEAR		2 YEAR		1995	
	AVG	# Trls	AVG	# Trls	AVG	# Trls
AgriPro MASON	61	50	60	43	58	36
NK COKER 9835	60	50	60	43	58	36
AgriPro MASON	61	40	60	33	58	28
PIONEER 2580	60	40	60	33	59	28
AgriPro MASON	63	35	62	28	60	23
FFR 525	61	35	59	28	57	23
AgriPro MASON	59	34	57	27	55	22
VA - MADISON	54	34	52	27	50	22
AgriPro MASON			56	32	54	27
VA - JACKSON			56	32	54	27
AgriPro MASON					59	24
GA - MOREY					57	24
AgriPro MASON					71	9
FFR 502					69	9
AgriPro MASON	59	40	57	33	54	27
AgriPro HICKORY	58	40	55	33	53	27
AgriPro MASON	63	19	61	11	50	5
AgriPro SAVANNAH	58	19	58	11	57	5
AgriPro MASON	60	47	59	41	58	36
NK COKER 9134	58	47	57	41	56	36

Note: Values are average yield in bushels per acre

12

9600218

Milling and Baking Quality

YR	VARIETY or LINE	LOC-CODE	MILLING					BAKING					NORRIS HARDNESS
			Protein %	Break Flour %	R	Total Flour %	R	Flour Prot. %	R	Cookie Diam. mm	R	T.G. R	
92	MASON	UA-71217	7.9	41.9	6	69.4	6	6.9	1	17.4	3	2	06
93	MASON	SM-96316	9.4	36.0	6	66.1	5	7.6	1	17.5	4	4	14
93	MASON	UA-96316	9.0	38.8	5	67.6	8	7.5	3	17.7	1	3	11
94	MASON	UA-95210	8.7	42.8	3	68.8	8	7.1	3	17.3	4	5	08
94	MASON	SM-95210	8.9	42.8	3	70.1	4	7.6	3	17.6	5	7	12
94	MASON	UA-96911	9.3	40.8	4	67.4	9	7.5	3	17.9	1	3	12
AVERAGE			8.9	40.5	5	68.2	7	7.4	2	17.6	3	4	11

Very High Quality Check for Comparison

92	MALLARD	UA-96107	8.5	49.2	3	69.0	5	7.3	1	17.8	1	3	08
93	MALLARD	SM-96302	8.4	41.1	3	67.3	3	7.2	1	18.4	2	4	05
93	MALLARD	UA-96302	9.1	44.4	2	74.3	1	7.9	1	17.6	1	3	13
94	MALLARD	UA-95204	8.3	45.5	2	73.4	2	7.1	3	18.3	2	4	08
94	MALLARD	SM-95204	9.0	44.8	2	72.6	1	7.9	3	18.7	2	7	12
94	MALLARD	UA-96901	8.8	45.2	2	72.7	2	7.2	3	18.2	2	6	12
AVERAGE			8.7	45.0	2	71.6	2	7.4	2	18.2	2	5	10

RATINGS: 1-2=EXCELLENT 3-4=VERY GOOD 5=ACCEPTABLE 6-7=QUESTIONABLE 8-9=UNACCEPTABLE